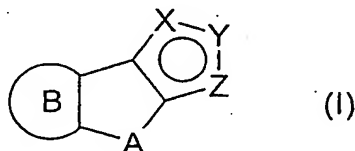


CLAIMS

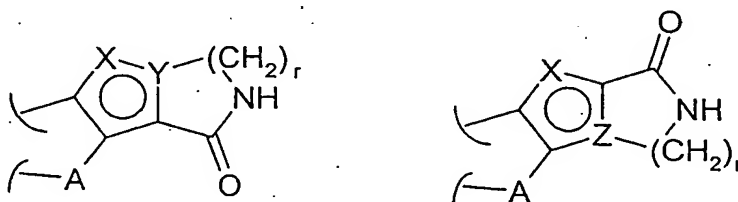
1. A method for treating diseases caused by and/or associated with an altered protein kinase activity which comprises administering to a mammal in need thereof an effective amount of a compound of formula (I)



wherein

X, Y and Z, being part of an aromatic ring are selected, each independently, from the group consisting of N, NR₁, S, O and CR₁;

R₁ is selected from the group consisting of hydrido, lower alkyl, perfluorinated lower alkyl, heterocyclyl, CN, CO₂R', COCF₃, COR', CONR'R'', NR'R'', C(=NR')NR'R'', CONHNH₂, CONHOR', NHCOR', CH₂NH₂, and CH₂NHCOR'; or R₁ may form, when part of Z or Y, a 5 to 7 membered ring together with the remaining of Y or Z, as per the formulae below



R' and R'' are selected, each independently, from the group consisting of hydrido, hydroxy, alkyl, hydroxyalkyl, alkenyl, alkynyl, aryl, arylalkyl, heterocyclyl or heterocyclyl-alkyl;

B is an aromatic 5 or 6 membered ring having from 0 to 3 heteroatoms selected from S, O and N;

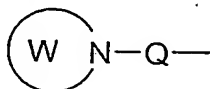
A is selected from the group consisting of -(CH₂)_m-,
-(CH₂)_n-CH=CH-(CH₂)_n- and -(CR_zR_y)_p-;

R_z and R_y are selected, each independently, from hydrido or lower alkyl;

each of the X, Y, Z and B rings being optionally further substituted by one or more -L-R₂ groups, wherein

L represents, each independently, a single bond, an alkylidene group or a divalent group selected from NH, NHCO, CONH, NHCONH, SO₂NH and NHSO₂;

R_2 is, each independently, hydrido, alkyl, 5 to 12 membered mono- or bi-cyclic ring having from 0 to 3 heteroatoms selected from S, O and N, optionally substituted with one or more $-(CH_2)_q-R_3$ groups; or R_2 is a group of formula



5 W is a 3 to 7 membered ring having one N heteroatom directly linked to Q and from 0 to 2 additional heteroatoms selected from the group consisting of S, SO, SO_2 , O, N and NR' , wherein R' is as above defined;

Q is a divalent group selected from CO, SO_2 and $(CH_2)_n$;

10 R_3 is selected, each independently, from the group consisting of alkyl, halogen, CF_3 , OCF_3 , NO_2 , CN, $C(=NR')NR'R''$, OR' , SR' , $OCOR'$, $OCONR'R''$, $COCF_3$, COR' , CO_2R' , $CONR'R''$, SO_2R' , $SO_2NR'R''$, $NR'R''$, $NR'COR'$, $NR'COOR'$, $NR'CONR'R''$, $NR'SO_2R'$, $NR'SO_2NR'R''$, wherein R' and R'' are as above defined;

m is an integer from 1 to 4;

n is, each independently, 0, 1, or 2;

15 p is 1 or 2;

q is, each independently, 0 or an integer from 1 to 3;

r is an integer from 1 to 3;

or isomers, tautomers, carriers, prodrugs, and pharmaceutically acceptable salts thereof.

20 2. The method of claim 1 wherein the disease caused by and/or associated with an altered protein kinase activity is a cell proliferative disorder selected from the group consisting of cancer, Alzheimer's disease, viral infections, auto-immune diseases and neurodegenerative disorders.

25 3. The method of claim 2 wherein the cancer is selected from carcinoma, squamous cell carcinoma, hematopoietic tumors of lymphoid or myeloid lineage, tumors of mesenchymal origin, tumors of the central and peripheral nervous system, melanoma, seminoma, teratocarcinoma, osteosarcoma, xeroderma pigmentosum, keratoxanthoma, thyroid follicular cancer and Kaposi's sarcoma.

4. The method of claim 1 wherein the cell proliferative disorder is selected from benign prostate hyperplasia, familial adenomatosis, polyposis, neuro-fibromatosis, psoriasis, vascular smooth cell proliferation associated with atherosclerosis, pulmonary fibrosis, arthritis glomerulonephritis and post-surgical stenosis and restenosis.

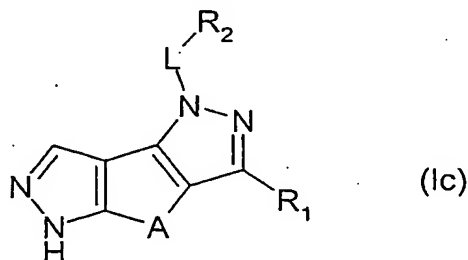
5

5. The method of claim 1 which provides tumor angiogenesis and metastasis inhibition.

6. The method of claim 1 further comprising subjecting the mammal in need thereof to a radiation therapy or chemotherapy regimen in combination with at least one cytostatic or cytotoxic agent.

7. The method of claim 1 wherein the mammal in need thereof is a human.

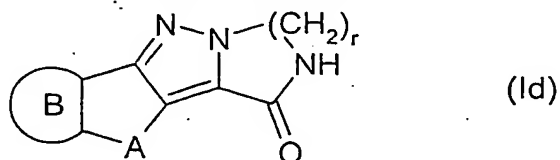
8. The method of claim 1 which comprises administering to a mammal in need thereof an effective amount of a compound of formula (Ic)



wherein R_1 , L and R_2 are, each independently, as defined in claim 1, and A is selected from the group consisting of $-CH_2-$, $-CH_2-CH_2-$, $-CH=CH-$ and $-CH_2-C(CH_3)_2-$.

20

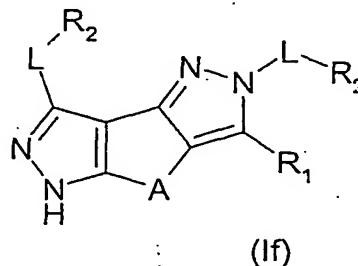
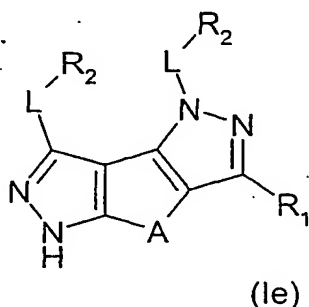
9. The method of claim 1 which comprises administering to a mammal in need thereof an effective amount of a compound of formula (Id)



wherein r and B are as defined in claim 1, A is selected from the group consisting of

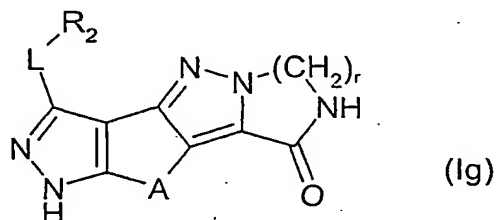
-CH₂-, -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-, and the B ring being optionally further substituted as defined in claim 1.

10. The method of claim 1 which comprises administering to a mammal in need thereof an effective amount of a compound of formula (Ie) or (If)



- wherein L and R₂ are, each independently and the same or different in each occasion, as defined in claim 1; A is selected from the group consisting of -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-; and R₁ is a group selected from NR'R'', CN, CO₂R', COR', CONR'R'', CONHOR', CONHNH₂ and C(=NOH)NR'R'', wherein R' and R'' are, the same or different, hydrido or lower alkyl.

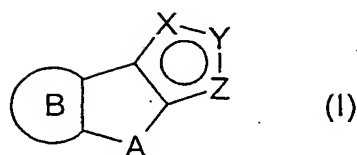
11. The method of claim 1 which comprises administering to a mammal in need thereof an effective amount of a compound of formula (Ig)



- wherein L, R₂ and r are as defined in claim 1 and A is selected from the group consisting of -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-.

12. A method for inhibiting protein kinase activity which comprises contacting the said kinase with an effective amount of a compound of formula (I) as defined in claim 1.

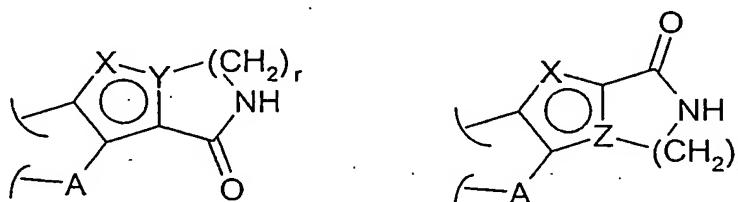
13. A compound represented by formula (I)



wherein

X, Y and Z, being part of an aromatic ring are selected, each independently, from the group consisting of N, NR₁, S, O and CR₁;

- 5 R₁ is selected from the group consisting of hydrido, lower alkyl, perfluorinated lower alkyl, heterocyclyl, CN, CO₂R', COCF₃, COR', CONR'R'', NR'R'', C(=NR')NR'R'', CONHNH₂, CONHOR', NHCOR', CH₂NH₂, and CH₂NHCOR'; or R₁ may form, when part of Z or Y, a 5 to 7 membered ring together with the remaining of Y or Z, as per the formulae below



10

R' and R'' are selected, each independently, from the group consisting of hydrido, hydroxy, alkyl, hydroxyalkyl, alkenyl, alkynyl, aryl, arylalkyl, heterocyclyl or heterocyclyl-alkyl;

- 15 B is an aromatic 5 or 6 membered ring having from 0 to 3 heteroatoms selected from S, O and N;

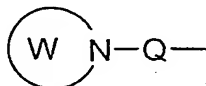
A is selected from the group consisting of -(CH₂)_m-,
-(CH₂)_n-CH=CH-(CH₂)_n- and -(CR_zR_y)_p-;

R_z and R_y are selected, each independently, from hydrido or lower alkyl;

- 20 each of the X, Y, Z and B rings being optionally further substituted by one or more -L-R₂ groups, wherein

L represents, each independently, a single bond, an alkylidene group or a divalent group selected from NH, NHCO, CONH, NHCONH, SO₂NH and NHSO₂;

- 25 R₂ is, each independently, hydrido, alkyl, 5 to 12 membered mono- or bi-cyclic ring having from 0 to 3 heteroatoms selected from S, O and N, optionally substituted with one or more -(CH₂)_q-R₃ groups; or R₂ is a group of formula



W is a 3 to 7 membered ring having one N heteroatom directly linked to Q and from 0 to 2 additional heteroatoms selected from the group consisting of S, SO, SO₂, O, N and NR', wherein R' is as above defined;

Q is a divalent group selected from CO, SO₂ and (CH₂)_n;

- 5 R₃ is selected, each independently, from the group consisting of alkyl, halogen, CF₃, OCF₃, NO₂, CN, C(=NR')NR'R'', OR', SR', OCOR', OCONR'R'', COCF₃, COR', CO₂R', CONR'R'', SO₂R', SO₂NR'R'', NR'R'', NR'COR', NR'COOR', NR'CONR'R'', NR'SO₂R', NR'SO₂NR'R'', wherein R' and R'' are as above defined;

m is an integer from 1 to 4;

- 10 n is, each independently, 0, 1, or 2;

p is 1 or 2;

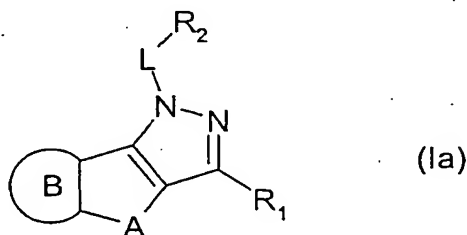
q is, each independently, 0 or an integer from 1 to 3;

r is an integer from 1 to 3;

or isomers, tautomers, carriers, prodrugs, and pharmaceutically acceptable salts thereof.

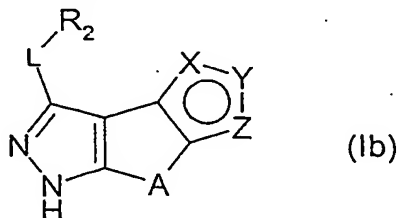
15

14. A compound according to claim 13 of formula (Ia)



- wherein B, R₁, L and R₂ are as defined in claim 13 and A is selected from the group consisting of -CH₂-, -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-, the B ring being
20 optionally further substituted as defined in claim 13.

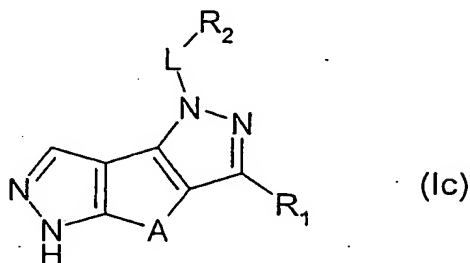
15. A compound according to claim 13 of formula (Ib)



- wherein X, Y, Z, L and R₂ are as defined in claim 13 and A is selected from the group
25 consisting of -CH₂-, -CH₂-CH₂-,

-CH=CH- and -CH₂-C(CH₃)₂-, the X, Y, Z ring being optionally further substituted as defined in claim 13.

16. A compound according to claim 13 of formula (Ic)



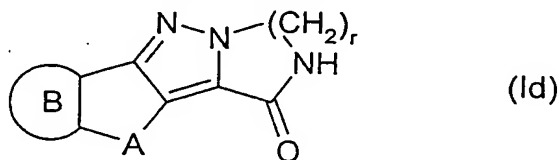
5

wherein R₁, L and R₂ are, each independently, as defined in claim 13, and A is selected from the group consisting of -CH₂-, -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-.

17. A compound of formula (Ic) according to claim 16 wherein each L is independently selected from methylene or a single bond and each R₂ is independently selected from hydrido, phenyl or a 5 or 6 membered aromatic heterocycle having 1 or 2 heteroatoms selected among N, O and S.

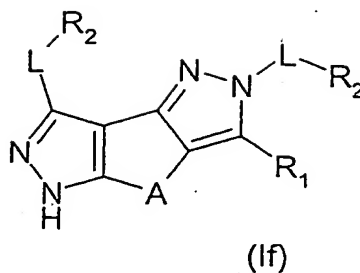
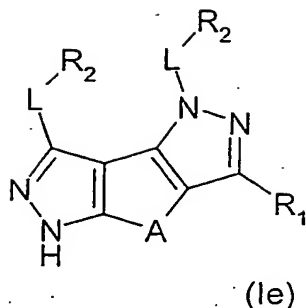
18. A compound of formula (Ic) according to claim 17 wherein R₂, being optionally further substituted as defined in claim 13, is selected from the group consisting of hydrido phenyl, pyridyl, pyridazinyl or pyrimidinyl.

19. A compound of formula (Id) according to claim 13



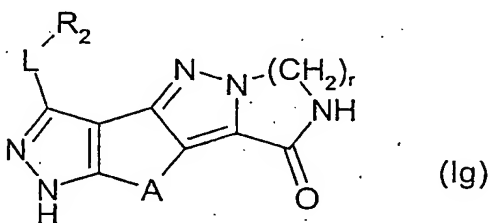
20 wherein r and B are as defined in claim 13, A is selected from the group consisting of -CH₂-, -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-, and the B ring being optionally further substituted as defined in claim 13.

20. A compound of formula (Ie) or (If) according to claim 13



wherein L and R₂ are, each independently and the same or different in each occasion, as defined in claim 13; A is selected from the group consisting of -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-; and R₁ is a group selected from NR'R'', CN, CO₂R', COR', CONR'R'', CONHOR', CONHNH₂ and C(=NOH)NR'R'', wherein R' and R'' are, the same or different, hydrido or lower alkyl.

21. A compound of formula (Ig) according to claim 13



wherein L, R₂ and r are as defined in claim 13 and A is selected from the group consisting of -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-.

22. A compound of formula (I) as defined in claim 13, optionally in the form of a pharmaceutically acceptable salt, selected from the group consisting of:

1. Ethyl 1-(4-methoxyphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
2. Ethyl 1-[4-(aminosulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
3. Ethyl 1-{4-[(methylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
4. Ethyl 1-{4-[(butylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
5. Ethyl 1-{4-[(dimethylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;

6. Ethyl 1-{4-[(diprop-2-ynylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
7. Ethyl 1-[4-(anilinosulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 5 8. Ethyl 1-[4-(methylsulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
9. Ethyl 1-(4-{[(2-hydroxypropyl)amino]sulfonyl}phenyl)-1,4,5,6-tetrahydropyrazolo-[3,4-e]indazole-3-carboxylate;
- 10 10. Ethyl 1-[4-(aminocarbonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
11. Ethyl 1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
12. Ethyl 1-phenyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
13. Ethyl 1-(4-fluorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 15 14. Ethyl 1-(4-bromophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
15. Ethyl 1-(4-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
16. Ethyl 1-(4-chlorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 20 17. Ethyl 1-(4-cyanophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
18. Ethyl 1-(4-nitrophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
19. Ethyl 1-[4-(trifluoromethyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 25 20. Ethyl 1-benzyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
21. Ethyl 1-(3-hydroxybenzyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
22. Ethyl 1-pyridin-2-yl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
23. Ethyl 1-(6-chloropyridazin-3-yl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 30 24. Ethyl 1-[4-(trifluoromethyl)pyrimidin-2-yl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;

25. Ethyl 1-(3-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
26. Ethyl 1-(3-chlorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 5 27. Ethyl 1-(3-fluorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
28. Ethyl 4,4-dimethyl-1-(4-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
29. Ethyl 1-pyridin-3-yl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 10 30. Ethyl 1-[4-(acetyl amino)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
31. Ethyl 1-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
32. 4-[3-(ethoxycarbonyl)-5,6-dihydropyrazolo[3,4-e]indazol-1(4H)-yl]benzoic acid;
- 15 33. Ethyl 1-[4-(trifluoromethoxy)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
34. Ethyl 1-butyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
35. Ethyl 1-(2,5-dimethylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 20 36. Ethyl 1-{4-[amino(imino)methyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate hydrochloride;
37. Ethyl 1-[4-(1H-imidazol-2-yl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate hydrochloride;
38. Ethyl 1-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 25 39. Ethyl 8-anilino-1-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
40. Ethyl 8-anilino-1-(2,2,2-trifluoroethyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
41. Ethyl 8-anilino-2-{2-[(tert-butoxycarbonyl)amino]ethyl}-2,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
- 30 42. Ethyl 8-amino-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate;
43. 1-(4-methoxyphenyl)-1,4,5,6-tetrahydro-pyrazolo[3,4-e]indazole-3-carboxamide;

44. 1-[4-(aminosulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
45. 1-{4-[(methylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 5 46. 1-{4-[(butylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
47. 1-{4-[(dimethylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
48. 1-{4-[(diprop-2-ynylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 10 49. 1-[4-(anilinosulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
50. 1-[4-(methylsulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 15 51. 1-[4-(aminocarbonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
52. 1-(4-[(2-hydroxypropyl)amino]sulfonyl)phenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
53. 1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 20 54. 1-phenyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
55. 1-(4-fluorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
56. 1-(4-bromophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
57. 1-(4-nitrophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
58. 1-(4-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 25 59. 1-(4-chlorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
60. 1-(4-cyanophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
61. 1-[4-(trifluoromethyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
62. 1-benzyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 30 63. 1-(3-hydroxybenzyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
64. 1-pyridin-2-yl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
65. 1-(3-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;

66. 1-(3-chlorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
67. 1-(3-fluorophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
68. 1-(6-chloropyridazin-3-yl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
5 69. 4,4-dimethyl-1-(4-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
70. 1-pyridin-3-yl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
71. 1-[4-(acetylamino)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
10 72. 1-(4-aminophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
73. 1-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
74. 4-[3-(aminocarbonyl)-5,6-dihydropyrazolo[3,4-e]indazol-1(4H)-yl]benzoic acid;
75. 1-(4-morpholin-4-ylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
15 76. 1-[4-(trifluoromethoxy)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
77. 1-butyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
78. 1-(2-hydroxyethyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
20 79. 1-(2,5-dimethylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
80. 1-(2,2,2-trifluoroethyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
81. 1-(2-amino-2-oxoethyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
82. 1-[4-(1H-imidazol-2-yl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
25 83. 4,4-dimethyl-1-(2,2,2-trifluoroethyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
84. 1-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
85. 2-(2-hydroxyethyl)-2,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
30 86. 8-Anilino-1-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
87. 8-Anilino-1-(2,2,2-trifluoroethyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;

88. 8-amino-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
89. 1-[4-methoxyphenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
90. 1-[4-(aminosulfonyl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
91. 1-{4-[(methylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-
5 carboxamide;
92. 1-{4-[(butylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-
carboxamide;
93. 1-{4-[(dimethylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-
carboxamide;
- 10 94. 1-{4-[(diprop-2-ynylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-
3-carboxamide;
95. 1-[4-(anilinosulfonyl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
96. 1-(4-{[(2-hydroxypropyl)amino]sulfonyl}phenyl)-1,6-dihydropyrazolo[3,4-
e]indazole-3-carboxamide;
- 15 97. 1-[4-(methylsulfonyl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
98. 1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
99. 1-phenyl-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
100. 1-(4-fluorophenyl)-
1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 20 101. 1-(4-methylphenyl)-
1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
102. 1-(4-cyanophenyl)-
1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
103. 1-[4-
25 (trifluoromethyl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
104. 1-(4-chlorophenyl)-
1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
105. 1-(4-bromophenyl)-
1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 30 106. 1-(4-nitrophenyl)-
1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;

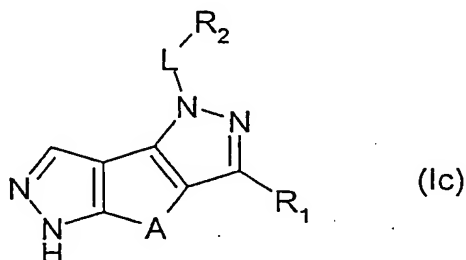
107. 1-benzyl-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
108. 1-(3-hydroxybenzyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 5 109. 1-pyridin-2-yl-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
110. 1-(3-chlorophenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
111. 1-(3-methylphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
112. 1-(3-fluorophenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 10 113. 1-(6-chloropyridazin-3-yl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
114. 1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxylic acid;
115. Ethyl 1-phenyl-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxylate;
- 15 116. Ethyl 1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxylate;
117. N-methyl-1-[4-(aminosulfonyl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
118. N-methyl-1-{4-[(butylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 20 119. N-methyl-1-{4-[(dimethylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
120. N-methyl-1-[4-(methylsulfonyl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
121. N-(allyloxy)-1-{4-[(butylamino)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 30 122. 7,8,9,10-tetrahydro[1,4]diazepino[1,2-b]pyrazolo[3,4-g]indazol-6(3H)-one;
123. 1-pyridin-3-yl-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;

124. 1-[4-(acetylamino)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
125. 4-[3-(aminocarbonyl)pyrazolo[3,4-e]indazol-1(6H)-yl]benzoic acid;
126. 1-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
127. 1-[4-(trifluoromethoxy)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
128. 4-[3-(ethoxycarbonyl)pyrazolo[3,4-e]indazol-1(6H)-yl]benzoic acid;
129. 1-(4-morpholin-4-ylphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
130. 1-(2-hydroxyethyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
131. 1-(2,5-dimethylphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
132. 1-(2-aminoethyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide hydrochloride;
133. 1-(2,2,2-trifluoroethyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
134. 1-[4-(1H-imidazol-2-yl)phenyl]-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
135. 1-methyl-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
136. 8,9-dihydro-3H-pyrazino[1,2-b]pyrazolo[3,4-g]indazol-6(7H)-one;
137. 2-(2-aminoethyl)-2,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide hydrochloride;
138. 2-(2-hydroxyethyl)-2,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
139. 2-methyl-2,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
140. 1-anilino-8,9-dihydro-3H-pyrazino[1,2-b]pyrazolo[3,4-g]indazol-6(7H)-one;
141. 1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazol-3-amine;
142. 1-[1-(4-methylphenyl)-1,6-dihydropyrazolo[3,4-e]indazol-3-yl]ethanone;
143. 1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carbonitrile;
144. 1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carbohydrazide;

145. 1-(4-methoxyphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carbohydrazide;
146. N'-hydroxy-1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboximidamide;
- 5 147. 1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxylic acid;
148. 1-(4-bromophenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylic acid;
149. 1-{4-[(butylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylic acid;
- 10 150. 4,4-dimethyl-1-(4-methylphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylic acid;
151. N-hydroxy-1-(4-methoxyphenyl)-1,6-dihydropyrazolo[3,4-e]indazole-3-carboxamide;
- 15 152. N-(allyloxy)-1-{4-[(butylamino)sulfonyl]phenyl}-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
153. N-(allyloxy)-1-(4-methoxyphenyl)-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
154. N-methyl-1-[4-(methylsulfonyl)phenyl]-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 20 155. 1-[4-(aminosulfonyl)phenyl]-N-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
156. 1-{4-[(butylamino)sulfonyl]phenyl}-N-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
- 25 157. 1-{4-[(dimethylamino)sulfonyl]phenyl}-N-methyl-1,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxamide;
158. Ethyl 2-(3-aminopropyl)-2,4,5,6-tetrahydropyrazolo[3,4-e]indazole-3-carboxylate hydrochloride;
159. 4,5,7,8,9,10-hexahydro[1,4]diazepino[1,2-b]pyrazolo[3,4-g]indazol-6(3H)-one;
- 30 160. 5,5-dimethyl-4,5,7,8,9,10-hexahydro[1,4]diazepino[1,2-b]pyrazolo[3,4-g]indazol-6(3H)-one;

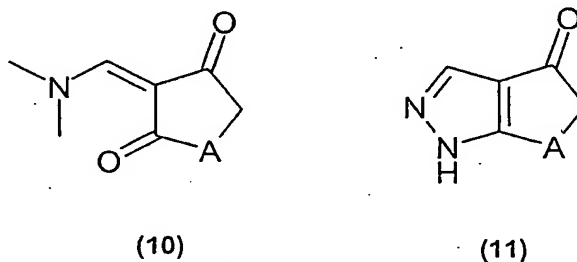
161. 5,5-dimethyl-4,5,8,9-tetrahydro-3H-pyrazino[1,2-b]pyrazolo[3,4-g]indazol-6(7H)-one;
162. 4,5,8,9-tetrahydro-3H-pyrazino[1,2-b]pyrazolo[3,4-g]indazol-6(7H)-one;
163. 1-anilino-4,5,8,9-tetrahydro-3H-pyrazino[1,2-b]pyrazolo[3,4-g]indazol-6(7H)-one.

23. A process for preparing a compound of formula (Ic) as defined in claim 16



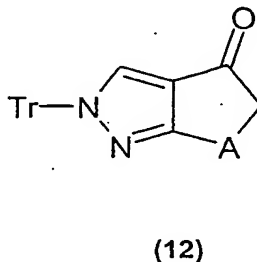
wherein L and R₂ are as defined in claim 16, R₁ is a group -COOEt or -CONH₂, and A is selected from the group consisting of -CH₂-, -CH₂-CH₂-, -CH=CH- and -CH₂-C(CH₃)₂-, which process comprises:

- a) reacting the compound (10) with hydrazine dihydrochloride, so as to obtain the compound (11)



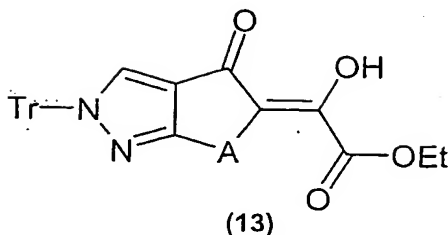
wherein A is as above defined, other than -CH=CH-;

- b) reacting the compound (11) with trityl chloride, so as to obtain the compound (12)

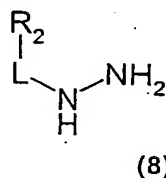


wherein Tr stands for trityl, and condensing it with oxalyl chloride so as to obtain the compound (13)

- 71 -



- c) reacting the compound (13) with a substituted hydrazine (8)

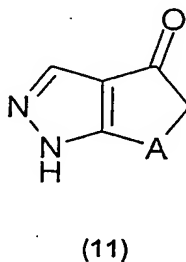


5 wherein L and R₂ are as defined in claim 16; so as to obtain a compound of formula (Ic) wherein R₁ is a group -COOEt and A is as above defined except -CH=CH-; and, optionally

- d) reacting this latter with ammonium hydroxide so as to obtain the corresponding derivative of formula (Ic) wherein R₁ is -CONH₂; and, optionally
- 10 e) reacting the compound of formula (Ic) wherein A is -CH₂-CH₂-, as obtained in steps c) or d), with a suitable oxidizing agent so as to obtain the corresponding derivative of formula (Ic) wherein A is -CH=CH-.

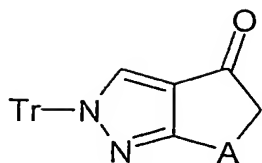
24. The process of claim 23 wherein, in step e), the oxidizing agent is 2,3-dichloro-
15 5,6-dicyano-1,4-benzoquinone.

25. The compound of formula (11)

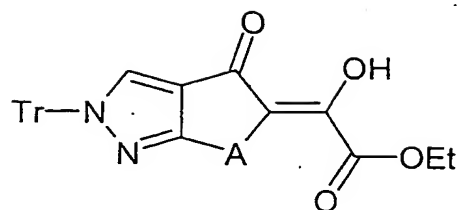


wherein A is selected from -CH₂- or -CH₂-CH₂-.

26. The compounds of formula (12) and (13)



(12)



(13)

wherein Tr is trityl and A is selected from $-\text{CH}_2-$, $-\text{CH}_2\text{CH}_2-$ and $-\text{CH}_2\text{C}(\text{CH}_3)_2-$.

27. A pharmaceutical composition comprising an effective amount of a compound of formula (I) as defined in claim 13 and, at least, one pharmaceutically acceptable excipient, carrier or diluent.

28. A pharmaceutical composition according to claim 27 further comprising one or more chemotherapeutic agents, as a combined preparation for simultaneous, separate or sequential use in anticancer therapy.

29. A product or kit comprising a compound of claim 13 or a pharmaceutical composition thereof as defined in claim 27, and one or more chemotherapeutic agents, as a combined preparation for simultaneous, separate or sequential use in anticancer therapy.

30. A compound of formula (I) or a pharmaceutically acceptable salt thereof, as defined in claim 13, for use as a medicament.

31. Use of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as defined in claim 13, in the manufacture of a medicament for treating diseases caused by and/or associated with an altered protein kinase activity.

32. Use according to claim 31 for treating tumors.